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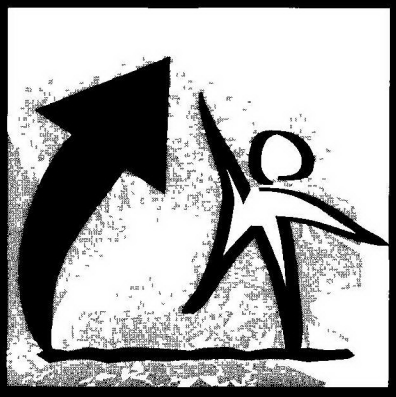

Joblessness and Precarious Work in Bulgaria: Addressing the Multiple Aspects of Vulnerability in the Labour Market

Alexandre Kolev

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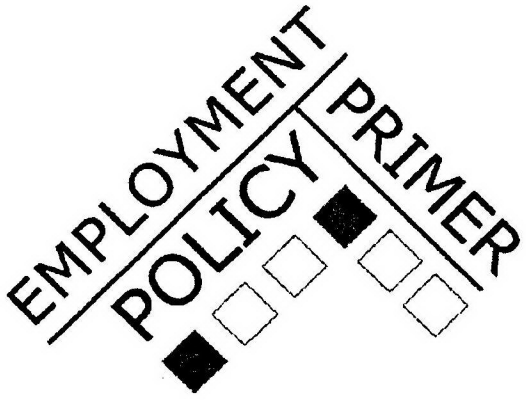

Abstract

This paper uses data from the Bulgarian Integrated Household Surveys and the International Social Survey Programme (ISSP) to examine the multiple aspects of vulnerability in the labor market in Bulgaria in the late 1990s. The paper starts by examining the links between poverty and labor market outcomes, drawing a particular attention to the heterogeneity of jobs and the multiple aspects of poverty. It then identifies those groups at risk of one or more poor labor market outcomes, revealing the existence of particularly vulnerable groups who cumulate a high risk of being unemployed, of remaining longer in unemployment, and if employed, of being low-paid, and working under precarious conditions.

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1 Introduction

Despite obvious signs of economic recovery in Bulgaria since the 1997 financial crisis, the situation in the labour market has remained rather bleak. In the early 2000s, unemployment remained very high and a fairly large number of workers were working under poor working conditions. This, naturally, raise a number of questions about the multiple aspects of vulnerability in the labour market. What has been the welfare repercussion of unemployment and low quality employment? Who were most at risk of joblessness and precarious employment?

Previous studies on the labour market in Bulgaria have typically focused on the rise in unemployment and its links with income poverty. These studies have also recognised that work does not necessarily keep families out of income poverty (Rutkowski, 1998). Less attention has been paid, however, to examine the quality of employment and its links with some income and non-income dimensions of poverty.

The aim of this paper is twofold. First, to examine the links between poverty and labour market outcomes in Bulgaria, drawing a particular attention to the heterogeneity of jobs and the multiple aspects of poverty. Second, to identify those groups at risk of one or more poor labour market outcomes. Extending the discussion on these issues is important to inform policy makers about the various aspects of vulnerability in the labour market, and to help design comprehensive policy measures that better address the problems of poverty and social exclusion.

To conduct this analysis, various statistical sources were exploited. The main data sources were the Bulgarian Integrated Household Surveys, which made possible the use of multivariate analysis, and the International Social Survey Programme data (ISSP), which contained comparable data on working conditions. Other data derived from the Labour Force

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Surveys (LFS) and the National Statistical Institute (NSI) were used to document some recent trends in the labour market.

This paper is organised as follows. Section 2 starts by reviewing some recent labour market developments in Bulgaria, paying a particular attention to the characteristics of non-employment and the changing nature of employment. Section 3 investigates the links between income poverty and labour market status. The aim of Section 4 is to address some non-income dimensions of poverty in the workplace by reviewing working conditions and identifying the nature of precarious employment. The determinants of poor labour market outcomes are then explored in Section 5 in order to establish a profile of the most vulnerable groups in the labour market. The last section concludes by presenting a summary of the main findings and some suggestions for policy makers.

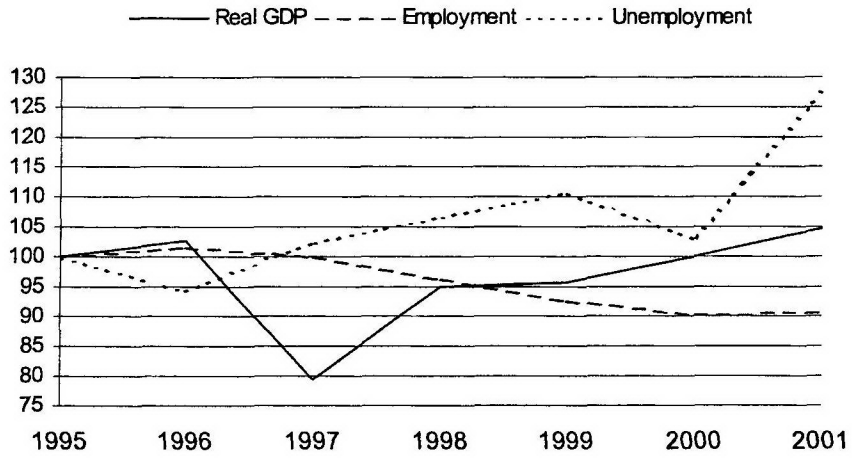
2 Recent Labour Market Developments

2.1 Trends in Economic Activity and Labour Market Status

In 1997, Bulgaria was hit by a severe financial crisis and experienced its second largest drop in economic activity since the collapse of communism in 1989. In the aftermath of the crisis, however, the macroeconomic situation has improved. The decline in GDP was reversed with several years of political stability and sound macro-economic reforms, and in the early 2000s, GDP has regained its pre-financial crisis level.

How much has the recent macroeconomic development affected the situation in the labour market? Figure 1 shows the trends in GDP, employment and unemployment for the period 1995-2001, revealing some interesting patterns regarding the relationship between economic activity and jobs. The 1997 financial crisis led to a large drop in output that did not translate into an equivalent adjustment in employment. Since then, however, employment continued to decline although output resumed. In mid 2001, output reached 105 percent of its 1995 level, compared with 90 percent for employment.

Figure 1: Real GDP, Employment and Unemployment, 1995-2001 (Indices 1995=100)



Source: IMF estimates for GDP, Labour Force Surveys for employment and unemployment data.
Note: First quarter of each year for GDP; employment and unemployment data refer to yearly average, except for 2001 where the data are for June only.

The decline in employment has been accompanied by a rapid increase in open unemployment. Some, but not all of the change can be explained by changes made to the sample of the Labour Force Survey[1]. Between 1995 and mid 2001, it is estimated than an additional of 124,000 people became "ILO" unemployed (see Box 1). The combination of economic recovery and rising unemployment can be explained by the recent progress in the privatization and restructuring of large state enterprises, a phenomenon observed earlier in several transition countries, but that failed to find a strong political support in Bulgaria until the 1997 financial crisis.

The ongoing restructuring of state enterprises is also visible from the changes in crude employment and non-employment ratios reported in Figure 2. In less than six years, the unemployment-to-population ratio has increased from 8 percent in 1995 to 18 percent in 2001. At the same time, the share of inactive individuals (those not in employment and not looking for a job) increased only slightly from 42 percent to 45 percent, suggesting a shift from "hidden" unemployment to open unemployment.

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[1] The sample of the Labour Force Survey was changed during 2001 with the replacement of all the households present in the sample. The new sample of about 24,000 households is based on the 2001 Census data, while the previous one was based on the 1992 Census. As a consequence, it is possible that the increase in measured unemployment is higher than what would have been observed without the change. The impact of the change in the sample should be limited, however.

Box 1: Definition of Labour Market Indicators

***Registered and "ILO" Unemployment*:** The registered unemployed refers to individuals who are registered at labour offices as unemployed. This administrative approach reflects national rules and conditions and usually generates figures that are different from those resulting from surveys relying on the so-called "ILO" concept" of unemployment or on a very similar concept. The ILO concept is based on three criteria and defines as unemployed those people who (1) have worked less than one hour in the last week, (2) are actively searching for work and (3) are currently available for work. In this paper, the ILO concept is used, unless otherwise noted.

***Unemployment Rate and Unemployment-to-Population Ratio*:** The unemployment rate corresponds to the segment of the labour force (unemployed and employed) which is unemployed. A different indicator is the unemployment to population ratio which refers to the overall share of the unemployed in the working age population (16 and above in Bulgaria). The unemployment rate is less sensitive than the unemployment ratio to changes in inactivity, and the larger the number of inactive, the smaller the unemployment ratio relative to the unemployment rate.

The same figure shows that the challenge of job creation remains daunting. Despite obvious signs of macroeconomic stabilization and economic recovery since the 1997 financial crisis, the share of employed individuals continued to drop from 40 percent in 1997 to 36 percent in 2001.

Figure 2: Changes in Labour Force Status, 1995-2001 (Percent)

Source: BIHS 1995, 1997 and 2001.
Note: Percent of population of age 16 and above.

2.2 The Reasons for Non-Employment

The reasons for non-employment are reported in Table 1, using data from the LFS. In mid 2001, 16 percent of the non-employed were ILO unemployed, that is not working but willing and available to work, and actively looking for a job. The other 84 percent were inactive, that is not in employment and not looking for a job.

Table 1: Reasons for Non-employment, 2001 *(percent)*

	Total	Male	Female
All Non-employed	**100.0**	**100.0**	**100.0**
Unemployed	16.5	19.9	13.6
Inactive	83.5	80.1	86.4
All Unemployed	**100.0**	**100.0**	**100.0**
Leaving school/completing military service and looking for first job	15.5	18.0	12.6
Others looking for first job	7.7	5.9	10.0
Made redundant	44.5	44.4	44.6
Seasonal/temporary job has ended	6.9	7.0	6.8
Unsatisfied with working conditions	3.6	3.9	3.2
Other reasons	21.7	20.8	22.8
All Inactive	**100.0**	**100.0**	**100.0**
Old age	55.8	51.8	58.9
Disability	6.2	7.2	5.3
In education	15.6	18.0	13.7
Family responsibility	5.5	1.3	8.8
Discouraged	10.3	12.2	8.7
Other	6.6	9.5	4.4

Source: Labour Force Survey, June 2001.
Note: Refers to population of working age (16 and above).

Among the unemployed, the main reason for unemployment was redundancy, while few workers became unemployed because of the end of seasonal work or the non renewal of temporary employment. Another important reason for unemployment is the entry into the labour force of school leavers and young people completing their military service and without prior work experience. The difficult transition from school to the working life is observed in many OECD and transition countries, where youth unemployment rates are often double that of adults (OECD, 2000; UNICEF, 2000). This has led many countries to adopt active labour market policies targeted at young people (O'Higgins, 1997). Bulgaria followed this path in 1996 with the introduction of its first youth programmes (see Box 2).

Box 2: Assessing the Impact of Active Labour Market Programmes in Bulgaria

The World Bank recently commissioned the Netherlands Economic Institute to conduct an impact evaluation of selected active labour market policies in Bulgaria. The study was based on a representative survey of 6,101 individuals who had participated in the programmes, as well as a control group. The analysis looked at the effectiveness of each of the programmes in increasing the reemployment probabilities of individuals. The impact assessment did not track, however, how long individuals who had become employed through programmes remained employed. The following results emerged from this study:

Temporary Employment Programmes had a significant positive net impact on the probability of being employed in particular among individuals facing specific difficulties, such as individuals aged 45 and above, the least educated, the long-term unemployed and those unemployed living in particularly depressed area. Temporary employment programmes had nonetheless the highest costs per placement. This called for targeting temporary employment programmes to the most vulnerable groups in the labour force, like unemployed people from the Roma minority, who cannot rely on any other programme to improve their chances of finding a job.

Training with Non-guaranteed Jobs had also a significant overall positive net impact on the probability of being employed, but tended to benefit more those with lower or secondary education and the youth. This programme was also among the least expensive, in terms of costs per placement.

Training with Guaranteed Jobs tended to be more effective to increase the chance of finding a job among the older unemployed. For other groups, however, training with guaranteed jobs was as effective as training without guaranteed jobs, and only slightly more expensive.

Subsidised Employment led significant results for all-sub groups, but the biggest effect were found for new entrants, females, those living in incomplete families and the unemployed with general secondary level of education. Subsidised employment was the programme with the lowest costs per placement.

Employment Associations provided mixed results. Their effects varied a lot by gender and level of education, and they were an expansive programme.

Self-employment Programmes tended to be extremely effective for those with more education and those with shorter spell of unemployment. Their costs per placement were nonetheless higher than that of subsidised and training programmes.

Source: Walsh and al. (2001)

Looking at the reasons for inactivity, one can see that old-age was mentioned by about 56 percent of all the inactive. Other reasons were the involvement in education (16 percent), family responsibility (6 percent), which was disproportionately mentioned by women, disability (6 percent), but also discouragement[2] (10 percent). Discouragement was actually the third most important reason for inactivity among men.

[2] Discouraged workers refers here as individuals of working age that are able to work, willing to work, but not actively looking for a job because they lost any hope of finding a job. This definition of discouragement differs slightly from the standard concept which refers to workers who do not look for a job because they believe that there is no suitable job available.

2.3 The Characteristics of Unemployment

Of major concern in Bulgaria is the high incidence of long-term unemployment that is documented in Table 2. Evidence around the world has shown a strong negative correlation between the probability of finding a job and the time spent unemployed, indicating that the long-term unemployed are at a higher risk of permanent labour market exclusion. In Bulgaria, over the period 1995-2001, nearly two out of three unemployed were jobless for a year or more, indicating the endemic nature of the problem.

Table 2: Unemployment by Duration *(percent of all unemployed)*

	1995	1997	2001
Less than a month	3.1	2.9	4.7
1 - 5 months	17.3	19.9	15.8
6 – 11 months	12.0	15.0	15.9
12 months and above	67.6	62.2	63.6
Total	100.0	100.0	100.0

Source: Labour Force Surveys.

Unemployment in Bulgaria also has an increasing regional dimension, a phenomenon observed in all transition countries engaged in industrial restructuring. According to the BIHS, while in 1995, the maximum variation in the unemployment rate across regions was around 13 percentage points, it increased to 32 percentage points in 2001. Unemployment rates (see definition in Box 1) broken down by regions are presented in Table X. It shows that in mid 2001, the region the most affected by unemployment was Montana. Other regions with unemployment rates above the national average were Rousse and Varna. The concentration of unemployment in particular areas reflects, to a large extent, the presence of large formerly-state owned enterprises that are being restructured.

Another feature of Bulgarian unemployment is the substantial imbalances between urban and rural areas. The same Table 3 shows that in mid 2001, unemployment varied from 27 percent in urban areas to 50 percent in rural areas. This unemployment gap between urban and rural areas indicates fewer job opportunities in rural areas, as well as lower mobility among the rural unemployed. Such low mobility raises a number of practical questions that would be worth investigating in further research, such as the affordability of transport costs for the unemployed, the existence of a well-functioning housing market, the adequacy of

public and private transport infrastructures, and the nature of the coping mechanisms available to the rural unemployed.

Table 3: Unemployment Rate by Location, 2001 ***(percent)***

National average	33.7
Rural	50.1
Urban	27.1
Sofia city	16.4
Sofia region	24.4
Bourgass	36.4
Varna	41.8
Lovetch	30.2
Montana	48.3
Plovdiv	37.9
Rousse	44.2
Haskovo	35.0

Source: BIHS, 2001.

Unemployment varied also a great deal across individuals with different characteristics. Table 4 shows both the individual composition of the unemployed and the incidence of unemployment among different groups in 2001. With respect to the composition of the unemployed, the data show that the unemployed were almost equally divided between men and women, but that individuals of age 26-45 composed the biggest group among the unemployed (45 percent), followed by the youth aged 16-25 (29 percent) and prime-age adults aged 46-55 (21 percent). The majority of the unemployed were ethnic Bulgarian (56 percent), but a large share was also composed of Roma (31 percent) and Turkish (11 percent). And the share of Roma and Turkish unemployed was higher than their overall share in the population.

With respect to the incidence of unemployment among different groups, the same Table 4 shows that the unemployment rate was almost identical for men and women. There are however large disparities by age, with a very high incidence of unemployment among the youth aged 16-25 (56 percent) that is twice bigger than that among prime age adults aged 46 and above. The incidence of unemployment is also disproportionately high among ethnic minorities. Compared with ethnic Bulgarians, the unemployment rate is three times bigger among Roma (77 percent) and two times bigger among Turks (51 percent). The incidence of

unemployment is also much higher than the national average among individuals with little education.

Table 4: Unemployment and Individual Characteristics *(percent)*

	Share Among all the Unemployed	Unemployment Rate
All	100.0	33.7
Female	51.4	34.0
Male	48.6	33.4
Age 16-25	29.4	55.9
Age 26-45	45.4	29.8
Age 46-55	20.8	27.8
Age 56+	4.4	25.9
Bulgarian	55.7	24.2
Turkish	10.6	50.6
Roma	31.1	77.0
Other	2.6	45.1
Primary education or less	8.0	71.7
Incomplete secondary	36.1	59.8
Secondary	47.3	29.3
University	8.6	13.5

Source: BIHS, 2001.

2.4 The Nature of Employment

Table 5 presents the characteristics of employment for the period 1995-2001. To some extent, the recent resumption of economic reforms in Bulgaria has already contributed to some visible changes in the nature of employment, in particular an increase in flexibility of the labour market. In mid 2001, wage employment constituted the vast majority of total employment in Bulgaria, with about 90 percent, but there have been signs of a small increase in self-employment since 1995.

The incidence of part-time employment has remained limited, comprising only 11 percent of total wage employment in 2001. For comparison, the share of part-time employment in total employment represented about 16 percent in the European Union, and 15 percent in OECD countries (OECD, 2001). What is remarkable is that the majority of part-time employment was voluntary.

Underemployment, as measured by the share of wage employed willing to work more, was also relatively low (7 percent). The low incidence of underemployment may explain why secondary wage employment (individuals with two jobs) was also very limited (less than 2 percent), at least compared with other transition countries like the CIS and post-conflict countries. However, a large share of the wage employed were also engaged in some agricultural activities (17 percent). Home production has indeed been shown to be an important coping mechanism in many countries engaged in the transition.

As Table 5 also shows, there is some evidence of a non-negligible rise in temporary work, which stood at 34 percent in 2001, compared with 23 percent in 1997 and 29 percent in 1995. What is remarkable is that in mid 2001, nearly one out of three temporary jobs were not governed by a written labour contract. This points to the importance of informal employment in Bulgaria[3].

The last 5 years have also witnessed a substantial growth of the private sector, which increased from 18 percent in 1995 to 49 percent in 2001. But to some extent, the increase in private employment reflects the privatisation of formerly state-owned enterprises, rather than the rapid creation of new private jobs. Other visible changes were the shift in the industrial structure of employment, with a decline in manufacturing and industry, and an increase in services.

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[3] In this paper, the definition of informal employment refers solely to those employees working without a written contract. This is a more restricted definition than the broader concept which is generally understood under the informal sector and which refers to unincorporated business. Indeed, according to the "The resolution concerning statistics of employment in the informal sector" (The Fifteenth International Conference of Labour Statisticians, January 1993), the defining element of informal employment is the fact the employer is not an incorporated business. That is, a worker is treated as informally employed if he (she) is either self-employed (in an unincorporated business), or an employee working for unincorporated employer.

Table 5: Characteristics of Employment, 1995-2001 *(in percent)*

	1995	1997	2001
All Employed	**100.0**	**100.0**	**100.0**
Wage employed	93.0	92.9	91.1
Self-employed	7.0	7.1	8.9
All Wage Employed	**100.0**	**100.0**	**100.0**
Part-time[a]	10.2	7.1	11.0
Looking for more work	1.0	0.7	1.7
Not looking for more work	9.2	6.4	9.3
Full-time	89.8	92.9	89.0
Looking for more work	5.8	4.3	5.2
Not looking for more work	84.0	88.6	83.8
Underemployed[b]	6.8	5.0	6.9
Has a second wage employment	1.2	0.8	1.5
Spent time in agricultural activities[c]	30.8	16.5	16.7
Contract – indefinite term	70.8	76.8	65.7
Contract – temporary	20.7	17.3	24.1
No contract – temporary	8.5	5.8	10.2
Public	81.8	75.9	51.6
Private	18.2	24.1	48.4
Manufacturing and industry	28.3	25.9	21.6
Construction	7.5	6.2	5.2
Agriculture and forestry	7.4	5.5	6.1
Transport and communication	9.7	9.5	11.2
Trade	9.9	8.5	12.0
Commercial services	6.2	7.0	7.4
Finance	7.2	8.3	8.1
Social services	23.8	29.1	28.4

Source: BIHS, 1995, 1997 and 2001.

Notes: Among working age adults (16 years and above) in employment in the past 7 days at the date of the interview . [a] working for a wage less than 30 hours a week, [b] part-time and full time employed looking for more work, [c] refer to the past 12 month at the date of the interview.

2.5 Mobility and Employment Status

Table 6 provides an indication of the extent of mobility across different types of employment and different labour market states by showing the employment status of individuals, as reported by them for different points in time. The following picture emerges from this table: first, immobility rates are relatively higher among the inactive and those employed under a contract of indefinite-term, and relatively lower among formal temporary workers (with contract) and the unemployed. In absolute terms, the repetition of unemployment over time appears worrisome. Among the unemployed in 2001, about 65 percent were also unemployed three years earlier in 1998, and 70 percent were unemployed six years earlier in 1995.

Table 6: Mobility Rates by Types of Employment and Labour Market Status

	Employment Status in 1998						Employment Status in 1995					
Employment status in 2001	Contract- permanent	Contract- temporary	No contract	Self-employed	Unemployed	Inactive	Contract- permanent	Contract- temporary	No contract	Self-employed	Unemployed	Inactive
Contract- permanent	90.8	1.2	0.1	0.4	1.8	5.7	86.1	1.3	0.3	0.4	3.1	8.8
Contract- temporary	6.0	64.0	0.3	0.6	5.1	24.0	8.4	56.5	0.3	0.0	6.3	28.5
No contract - temporary	6.3	3.1	74.6	2.3	3.1	10.6	4.8	2.1	71.9	0.8	4.3	16.1
Self-employed	5.3	1.5	0.0	86.9	1.4	4.9	13.9	3.4	1.0	70.2	4.8	6.7
Unemployed	17.2	5.6	1.2	1.0	65.4	9.6	9.7	3.3	1.4	0.6	69.9	15.1
Inactive	5.5	0.6	0.1	0.2	1.5	92.1	6.9	1.2	0.2	0.5	1.1	90.1

Source: BIHS 2001.
Note : These mobility rates are based on the records provided by the respondents in the 2001 survey.

Second, temporary work – both formal and informal – tends to be the main entry point into employment for the inactive and the unemployed. For instance, among temporary workers in 2001, about 34 percent were inactive and 8 percent were unemployed three years earlier. Among permanent workers in 2001, however, only 6 percent were inactive and 2 percent were unemployed in 1998. Temporary work is also the second most important destination, after unemployment, for those workers who lost their permanent job status after

1998.

Third, the extent of immobility within informal employment (with no contract) is high relative to that in formal temporary jobs (with contract). For instance, the share of individuals who remained in the same status between 1998 and 2001 was 75 percent among informal workers compared with 64 percent among formal temporary workers. Most of the new informal workers in 2001 were either inactive (11 percent) or permanently employed (6 percent) in 1998, and very few were unemployed or formally temporary employed (3 percent). A low exit rate from informal work is also observed even after a longer period: in 2001, 72 percent of informal workers were in the same status 6 years before. The immobility rate for informal employment is also higher than that of unemployment, suggesting that it may be even more difficult for an individual to exit informal employment than unemployment.

Lastly, in 2001, the newly unemployed were mainly individuals previously employed under a contract of indefinite term, likely in former state-owned enterprise, and persons who were not in the labour force, presumably students. This is consistent with the reasons for unemployment discussed earlier.

Overall, then, these results point to a worsening situation in the labour market despite economic recovery. Unemployment increased tremendously and long-term unemployment remained very high. The nature of employment also changed substantially, with a rise in private and informal jobs. Finally, of concern is the fact that mobility rates out of unemployment and informal employment appeared strikingly low. Considering these recent labour market developments, it is worth investigating the links between employment status and household welfare, issues that are explored in Sections 3 and 4.

3 Revisiting the Links Between Income Poverty and Labour Market Status

3.1 Poverty Incidence and Labour Market Characteristics

Like in most countries in the world, income poverty in Bulgaria is strongly related with labour market status[4]. Table 7 presents the poverty rates associated with different groups

[4] For the purpose of comparison with an earlier study on poverty and the labour market in Bulgaria (Rutkowski, 1998), poverty is defined here in relative terms. The unit of analysis is the individual and each individual is defined as being in "income" poverty if he or she falls in the bottom quintile of per capita household expenditure.

in the labour market and with different characteristics of unemployment and jobs. As far as poverty and labour market status are concerned, the broad picture that emerges is that since 1995, the relative welfare situation of the unemployed has deteriorated to the benefit of the employed. Moreover, throughout the period 1995-2001 the incidence of poverty was highest among the unemployed and lowest among the employed. In mid 2001, 41 percent of the unemployed fell below the relative poverty line, compared with 23 percent for the inactive and 12 percent for the employed. However, these aggregate poverty rates by labour market status do not provide an adequate picture of the most vulnerable groups in the labour market.

Looking more carefully at the poverty incidence for different characteristics of employment and unemployment, one can see that income poverty is not evenly spread among all unemployed and employed. Evidence from the BIHS shows the existence of vulnerable groups in the labour force that cannot be identified with the naïve classification employed-unemployed. For instance, in mid 2001, the incidence of poverty was the highest among the long term unemployed (46 percent). But poverty was also very high among certain groups of workers, such as those in agriculture (39 percent) and those in informal employment (33 percent), who were at a higher risk of income poverty than the unemployed for less than 6 months (below 28 percent).

The same table also shows that, while on average poverty has declined among the wage employed, it has actually increased among workers in informal jobs. These results indicate the growing risk of social exclusion among certain groups of workers and point to the importance of adopting an holistic approach to vulnerability that monitors not only trends in unemployment and unemployment duration, but also changes in the nature and quality of employment. The issue of job quality has become a growing concern in OECD countries (see Box 3), where recent evidence shows that many of the poor hold low-paid jobs or cycle between short-term jobs and non-employment, rather than being continuously excluded from the labour market (OECD, 2001).

Another concern is the rise of poverty concentrated in the agricultural sector. Since 1995, workers in agriculture have seen a steady decline in their living standards.

Box 3: The Issue of the "Working Poor" in OECD Countries

A key message that emerged from the 2001 OECD Employment Outlook is that poverty among working households in OECD countries must not be neglected by policy makers, as it affects large numbers of people. Evidence in these countries shows that the overlap between work and poverty is quite high, and increased when work over a multi-year period is considered. There are also important differences within OECD countries regarding the incidence of work and poverty. Compared to the EU member states, a greater share of total time spent in poverty in the United States is experienced by households with substantial work attachment. Among the working-age households poor in a given year, only 2 in 5 contained no adult worker in the EU and 1 in 5 in the USA. Moreover, among those who were "permanent-income" poor over three years, the shares without employment fell to 1 in 4 and 1 in 10 respectively. This suggests that low-paying and precarious jobs better characterize the experience of some poor households than does continuous exclusion from the labour market. Accordingly, an effective employment-oriented social policy should also pursue the objects of insuring income adequacy among working households, improving employment retention among poverty exiters, and helping low-paid workers to move-up job ladders.

Source: OECD (2001).

Table 7 presents other interesting results. Throughout the period 1995-2001, the risk of poverty was lower for the self-employed than for the wage employed, and lower for public employees than for private employees. During the same period, voluntary part-time workers had poverty rates close to the average among the wage employed, while involuntary part-time workers, and underemployed workers in general, were substantially worse off. In other words, flexible work arrangements were not necessarily associated with greater poverty when they were based on deliberate choices.

Table 7: Poverty Rates by Labour Market Characteristics *(percent)*

	1995	1997	2001
Labour market status			
Out of the labour force	26.7	23.6	23.1
Unemployed	32.6	35.2	41.1
Employed	16.6	16.8	12.1
Unemployment duration			
0-3 months	9.3	11.3	24.4
3-6 months	13.3	27.4	28.5
6-12 months	31.0	37.3	35.6
More than 12 months	41.8	39.9	45.7
Nature of employment			
Wage employed	16.9	17.0	12.4
Self-employed	9.0	12.0	8.2
Type of wage employment			
Contract – permanent	12.7	15.2	8.9
Contract – temporary	20.5	19.9	13.2
No contract – temporary	26.6	24.3	32.6
Public	14.4	15.9	9.8
Contract – permanent	12.9	14.4	8.9
Contract – temporary	21.2	25.8	10.2
No contract – temporary	11.5	9.0	46.1
Private	20.4	18.6	15.0
Contract – permanent	9.7	17.4	8.9
Contract – temporary	18.6	14.8	14.6
No contract – temporary	29.0	25.8	31.7
Part-time looking for more work	26.3	33.3	21.2
Part-time not looking for more work	16.9	10.7	13.5
Underemployed	24.5	16.1	19.2
Sector of employment			
Manufacturing and industry	15.7	13.6	10.5
Construction	18.7	18.7	13.6
Agriculture and forestry	25.1	30.7	39.2
Transport and communication	8.0	13.9	12.1
Trade	12.3	13.7	7.9
Commercial services	21.7	25.4	17.6
Finance	22.1	14.6	13.9
Social services	12.0	15.5	8.3

Source: BIHS, 1995, 1997 and 2001.
Note: Among working age adults (16 years and above). Poverty refers as the bottom quintile of per capita household expenditure.

3.2 Composition of the Poor

The labour market composition of the poor is presented in Table 8. Between 1995 and 2001, the relative share of the inactive among the poor stayed virtually constant at around 47 percent, while the share of the unemployed rose from 13 percent to 34 percent. During the same period, the share of the employed – the "working poor" - dropped from 40 percent to 20 percent. The changing composition of the poor mirrors, to some extent, the sharp decline in employment and the large increase in unemployment observed overall in the labour market (Figure 2). However, in mid 2001, the unemployed tended to be disproportionately concentrated among the poor. It is also interesting to note that the share of the inactive among the poor was not different than among the non poor.

Among the poor unemployed, there is evidence of a rising share of both the long-term unemployed (above 12 months) and the very short-term unemployed (less than 3 months). At the same time, the vast majority of the poor unemployed were the long-term unemployed: in mid- 2001, about 2 out of 3 poor unemployed were in unemployment for more than a year.

Among the working poor, there was an increase in the share of informal workers (with no contract) who tended to be over-represented among the poor. While in mid 2001 informal workers accounted for 10 percent of total wage employment, they represented nearly 27 percent of the working poor.

Private and part-time employees were also over-represented among the poor, but to a lower extent. In mid 2001, the share of private workers represented 62 percent of the poor wage employed, but only 48 percent of all the wage employed. Similarly, while part-time workers accounted for 11 percent of all wage employed, they represented 13 percent of the working poor. What is also remarkable is that in 2001 the working poor were predominantly in the private sector, while the reverse was true in 1995 and 1997. This changing composition of the working poor can be explained by the growth in private employment where the poverty rate is higher.

Lastly, the biggest share of the working poor, one out of five, was employed in agriculture, and this is also higher than the overall share of agriculture in total employment. Other large groups among the working poor were workers in social services and in manufacturing/industry, but these groups were less numerous among the poor than among

the non-poor.

Table 8: Composition of the Poor by Labour Market Characteristics *(in percent)*

	1995	1997	2001
All working Age Adults	**100.0**	**100.0**	**100.0**
Out of the labour force	46.7	48.6	46.4
Unemployed	13.0	19.1	33.9
Employed	40.3	32.2	19.7
All Unemployed	**100.0**	**100.0**	**100.0**
0-3 months	5.2	6.8	7.2
3-6 months	5.9	19.4	7.8
6-12 months	28.8	28.3	20.0
More than 12 months	60.1	45.5	65.0
All Wage Employed	**100.0**	**100.0**	**100.0**
Contract – indefinite term	58.1	69.7	47.5
Contract – fixed term	27.3	21.8	25.7
No contract	14.6	8.5	26.8
Part-time	11.8	8.7	13.3
Full time	88.2	91.3	86.7
Private	24.0	27.3	61.6
Public	76.0	72.7	28.4
Manufacturing and industry	28.6	21.5	18.1
Construction	9.1	7.1	5.7
Agriculture and forestry	12.0	10.4	19.2
Transport and communication	5.0	8.1	10.9
Trade	7.9	7.1	7.5
Commercial services	8.8	10.8	10.6
Finance	10.2	7.4	9.1
Social services	18.4	27.6	18.9

Source: BIHS, 1995, 1997, 2001.
Note: Among working age adults (16 years and above) in bottom quintile of per capita household expenditures.

3.3 Household Circumstances Associated with Income Poverty

The previous discussion has documented the extent of poverty according to different labour market characteristics of individuals. The highest poverty rates were observed among the long-term unemployed and informal workers. The contribution of family circumstances to each individual's poverty status was however ignored. Considering that the unit of analysis adopted was the individual, but that poverty was assessed in terms of the adequacy of total

expenditures per capita at the household level, it is worth asking what the contribution of the household environment to income poverty has been?

For the purpose of policy recommendations, it is practical, although simplistic, to relate the poverty status of a family with its demographic and labour market characteristics, as measured by: the number of children, unemployed members, inactive adults (16-64 years), inactive pensioners (65 years and more), and wage earners with different wage levels. The marginal impacts of these factors on the probability of being poor are reported in Table 9 for four separate groups in the labour market: the employed, the unemployed, inactive adults and not working pensioners.

The results show that the presence of children increases the probability of being income poor substantially for the employed, the unemployed and the inactive adults, while it is not particularly important among pensioners. Compared with the employed, the risk of being income poor due to the presence of children is increased by three times among the unemployed and the inactive adults. In other words, the non-employed tend to have more difficulties than the employed to avoid poverty when they have children. The strong association between children and income poverty in Bulgaria is in part due to the very low level of child benefits that have failed to cover adequately the basic needs of children. The real value of child benefits declined tremendously in the past ten years as the result of high inflation in the mid 1990s and their "freezing" in nominal terms since 1997. Among families with 2 children for instance, child benefits dropped from 12 percent of family income per capita in 1991 to 4 percent in 1998 (Gantcheva and Kolev, 2001).

With respect to the number of inactive people[5] in the household, the presence of inactive adults has a significant impact on poverty among all groups, except pensioners, but the impact is in general less important than that of children. The poverty impact attached to the presence of older inactive persons varies, depending on the labour market status of the individuals. The presence of inactive pensioners increases the probability of being poor among the employed, while it has no particularly significant impact among the unemployed and the inactive. This difference may reflect the various life style arrangements adopted by

[5] By definition, the inactive are those individuals who do not work for a wage or a revenue and who are not willing to do so. Women on maternity leave are considered employed.

pensioners with different level of pension benefits. Those with low pensions could in fact have a higher probability to live with and rely on their relatives who are employed, avoiding

Table 9: Marginal impact of Various family Circumstances on the Probability of being Poor among Individuals with Different Labour Market Status, 2001 *(percent)*

Explanatory Variables	Jobholders (I)	Unemployed (II)	Adults Inactive (III)	Pensioners Inactive (IV)
Dependent Children				
0 children (control)	-	-	-	
1 child	6.3**	18.6**	19.3**	4.0
2 or more children	11.4**	34.4**	33.9**	11.4*
Inactivity				
0 inactive of age 16-64 (control in equations I, II, and IV)	-	-		-
1 inactive of age 16-64 (control in equation III)	3.4**	11.4**	-	2.5
2 or more inactive of age 16-64	11.0**	18.4**	11.5**	3.4
0 inactive of age 65 and more (control in equations I, II, and III)	-	-	-	
1 inactive of age 65 or more (control in equation IV)	3.4*	4.1	5.9*	-
2 or more inactive of age 65 or more	11.4**	-3.9	8.0	1.7
Unemployment				
0 unemployed (control in equations I, II, and III)	-		-	-
1 unemployed (control in the equation II)	7.8**	-	10.1**	10.7**
2 or more unemployed	24.2**	26.8**	33.9**	14.6**
Underemployment				
0 underemployed (control in equations I, II, III and IV)	-	-	-	-
1 underemployed	-1.3	10.7	-7.9	-13.4**
2 or more underemployed	-0.2	-20.0	23.5	(No obs.)
Jobs Type				
0 wage earners (control in equations II, III, and IV)		-	-	-
1 low paid jobholder (control in the equation I)	-	-9.1**	-9.3**	7.5
2 or more low paid jobholders	17.8**	34.0**	27.6**	-4.9
1 middle paid jobholder	-5.7**	-16.0**	-11.0**	-11.47**
2 or more middle paid jobholders	-2.5*	-27.8**	-12.0**	-5.4
1 high paid jobholder	-5.5**	-33.7**	-15.3**	-14.2**
N	2411	1225	1651	1332
Pseudo R^2	0.1239	0.2006	0.1667	0.0318

Source: BIHS 2001

Note: ** and * means statistically significant at 5% and 10 % levels respectively. Low-paid, middle-paid and high paid workers are defined according to first, second and third quartile of the wage distribution. In a probit model of the form $\Pr(Y > 0) = F(bX + cZ)$, where X is a continuous variable and Z is a dummy variable, the marginal impact of X is computed at the mean of this variable and obtained as $f(b\overline{X})b$ not b, where F and f are respectively the standard normal cumulative distribution and density probability functions. For a dummy

variable Z, the marginal impact is computed as the difference $F(b\overline{X}+c)-F(b\overline{X})$.

those who are unemployed or inactive and who cannot support them. The increasing dependency of poor pensioners on wage-earners could then tend to push the household into poverty. Conversely, better-off pensioners could serve as a safety net for the non-employed and attract disproportionately those among their relatives who have no jobs. This can be one explanation why the presence of elderly people does not seem to increase particularly the risk of poverty among the non-employed, while it does among the employed. However, further research would be needed to validate this scenario.

As expected, unemployment in the household has a dramatic impact on each member's poverty risk for the employed, the unemployed and the inactive adults. But the impact of family unemployment is less important among pensioners. For instance, among employed individuals, compared with zero-unemployed family member, the probability of being poor increases by 8 percent with the presence of one unemployed family member, and by 24 percent with two or more unemployed members. One can see from Table 12 that the poverty contribution of unemployed family members is double that of inactive members. Among unemployed individuals, compared with only one family member unemployed, the poverty risk is increased by 27 percent when the family has two or more unemployed.

Contrary to unemployment, and after controlling for wages, the result show no evidence that underemployment in the household significantly affects the poverty status of the employed and the unemployed.

The level of wages seems to matter. Among the employed, it is interesting to notice that compared with families with one low-paid wage earner, two or more members in a low paid job increases the probability of being poor by 18 percent. This is less than the impact associated with an equivalent number of unemployed members but higher than that associated with the number of inactive members and children. Among the unemployed and inactive adults, one low-paid worker is still better than zero-wage earner as it reduces the risk of poverty by about 9 percent, but with two or more low-paid workers, the poverty risk is increased by 34 percent among the unemployed and 28 percent among the adults inactive.

What is also remarkable is that among the unemployed the impact of additional low-paid workers in the household is larger than that of additional unemployed members.

No surprisingly, the presence of middle-paid and high paid workers in the family contributes to reduce the poverty risk. Among the employed, the poverty reduction impact associated with the presence of middle *versus* high paid workers is similar and varies from 2 to 6 percent depending on the actual number of wage earners. Among the non-employed, whether a family can rely on one middle-paid household member or one high paid member makes a large difference: compared with zero-wage earners, the poverty risk with one middle-paid member decreases by 11 percent among adults and pensioners inactive and by 16 percent among the unemployed. With one high paid workers, the associated decline in the risk of poverty accounts for nearly 15 percent among the inactive and 34 percent among the unemployed.

What, then, are the lessons that can be drawn from these preliminary results? In terms of our understanding of poverty, the results show first that there are a number of similarities regarding the household circumstances associated with poverty among the employed and the non-employed adults, despite their obvious different status in the labour market. These circumstances are the presence of children, unemployed, inactive adults, and low-paid workers. Second, the extent to which these factors affect each individual's poverty status varies, depending on the employment status of the individual. No surprisingly, the non-employed tend to be more vulnerable to a deterioration of the household labour market environment, or the presence of children than the employed. Third, there is one important difference between the employed and the non-employed regarding the contribution of family events on poverty, which is the role of pensioners. The presence of pensioners contributes to push the employed into poverty while it does not seem to have an impact on the poverty status of the unemployed, and to some extent, of the inactive adults.

4 Addressing the Non-income Dimension of Poverty in the Workplace

The previous section has focused on the income dimension of poverty, identifying and quantifying the contribution of household labour market performances and other family events on each individual's poverty status. It has also shown that the traditional dichotomy, for a poverty profile, between the employed and the unemployed has limitations, given the

heterogeneous nature of jobs and the high incidence of income poverty among particular groups of workers. The aim of this section is to complement our understanding of income poverty and labour market outcomes by investigating some non-income aspects of workers' well-being in Bulgaria.

4.1 Working Conditions: Principles and Reality

There are several reasons why the monitoring of working conditions should be a matter of concern for Bulgarian policy makers. First, as for inadequate earnings, poor working conditions have strong negative effects on workers' well-being and their families, and thus represent important non-income dimensions of poverty. Second, poor working conditions often result in low labour productivity, which in turn maintains the vicious cycle of poverty and burdens the productivity of the Bulgarian economy. Last, but not least, the recognition of a certain rights to workers and the standardisation of working conditions to those in the EU is a condition for Bulgaria entry into the EU (see Box 4).

Box 4: EU Accession Requirements in the Labour Area

***Equal opportunities for Men and Women*:** Stage I of Accession measures require the country to comply with directives 75/117/EEC and 76/202/EEC, which contain provisions regarding (1) equal pay; (2) equal treatment for men and women in access to jobs, promotion, training and working conditions. Stage II measures require the country to comply with directives 79/7/EEC and 86/378/EEC, which apply the principle of equal treatment for men and women to statutory and occupational social security schemes.

Coordination of Social Security Schemes. The EU's provisions regarding social security legislation are based on four principles: (1) the legislation of only one country can be applicable; (2) workers from other stats receive equal treatment; (3) workers retain the rights they have acquired; and (4) periods of insurance or residence are aggregated.

Health and Safety at Work: Measures at stage I require compliance with Directive 89/39/EEC which stipulates that employers must assess the risks to safety and health at work, ensure that workers receive appropriate safety and health information, and provide workers with adequate safety and health training. Legislation must also include provisions regarding protective and preventive services, health surveillance, and the participation of workers in health and safety issues at work. At Stage II, countries are required to comply with a set of 13 directives that include regulations on maintaining the health and safety of workers in the most critical areas (workplace equipment, safety signs, chemical exposure).

Labour Law and Working Conditions: At Stage I countries are required to comply with the contents of four directives that protect workers' rights in the area of (1) collective redundancies; (2) undertakings, business or part of business; (3) insolvency of employers; and (4) young people at work. At Stage II, they are required to comply with three additional directives that regulate working conditions, working time and information and consultation with workers.

Source: Garibaldi et al. (2001).

The protection of the health and rights of workers has long been part of Bulgarian

labour legislation. The legal basis for the provision of decent working conditions is found in the Labour Code and in the Social Security Code, as well as in a number of acts and regulations by the Ministry of Labour and Social Policy, and the Ministry of Health (Garibaldi et al., 2001). Since the beginning of transition and the move towards EU accession, several changes and amendments were introduced to suit the needs of a market economy and EU requirements in the field of labour.

To date, most EU requirements have been transposed into Bulgarian legislation. The adoption of the labour component of the *Aquis Communautaire,* which implies the recognition of certain rights to workers and the standardisation of working conditions to those in the EU, should therefore not be a problem for Bulgaria.

There are some concerns, however, that the lack of an effective enforcement and monitoring system has maintained a substantial gap between principles and reality. Table 10 offers further insight by presenting several measures of working conditions and job quality across sectors around 2000 in Bulgaria. The first indicator is the incidence of employees with no written contract which has been referred to in this paper as the informally employed. The data show that a national average of 10 percent of the employed were working in the informal sector, and thus not covered by the Labour Code or any other regulations. Informal jobholding was also not evenly distributed across sectors. A high concentration of informal workers was observed in agriculture and construction, where their share reached 41 percent and 31 percent respectively. In trade, the incidence of informal job was also high with nearly 17 percent.

Another important indicator of the quality of employment is job stability. This can be captured, although imperfectly, by the average length of time spent with the current employer. Longer job tenure, which refers to longer continuous spells of employment, is often considered as a desirable aspect of a job given the positive links between tenure and earnings, and between tenure and job satisfaction. From the same Table 10, one can see that there are large disparities in job tenure by sectors. Job tenure tends to be particularly low in trade and agriculture, and much higher in social services and transport. This indicator needs to be treated with caution, nonetheless. A long job tenure may reflect low outside job opportunities rather than a strong level of satisfaction with the current job. Very long job tenure can also mean being stuck in a sector that is declining during transition. Earnings are

indeed concave in job tenure in Bulgaria, they increase up to an estimated average of 17 to 20 years of tenure and then start to decline.

Table 10: Selected Non-income Measures of Job Quality Among the Employed by Sector Around 2000

	No Contract	Job Tenure	Work-Related Injuries and Diseases	No Social Insurance Contributions Paid by Employers	No Annual Leave Paid by Employers[a]	Duration of Paid Annual Leave[a]
	(percent)	*(years)*	*(number per thousand workers)*	*(percent)*	*(percent)*	*(days)*
All	10.2	10.8	2.5	25.6	21.1	18.3
Manufacturing and industry	4.3	11.5	7.1	17.2	13.6	18.1
Construction	30.9	11.8	3.7	41.9	45.9	10.1
Agriculture and forestry	41.5	9.6	0.6	61.1	54.9	9.5
Transport and communication	5.0	12.0	4.1	17.3	12.7	19.6
Trade	16.9	5.4	0.5	45.6	36.6	10.8
Commercial services	10.1	10.7	0.3	25.4	25.8	15.9
Finance	7.5	10.8	0.6	28.7	20.5	16.5
Social services	3.6	12.3	0.2	14.4	10.7	25.4

Source: BIHS, 2001; 1999 data from Bulgarian authorities for work-related injuries.
Note: [a] Among eligible employees, i.e. with a at least 8 months of length of service.

The incidence of registered work-related injuries and diseases reported in the same table provides a rough estimate of the extent of safe and healthy conditions of work. The data show large disparities across sectors, with the most dangerous work concentrated in industry, transports, and construction. Inadequate safety and health standards should be of major concern, given their disastrous impact on the quality of life of workers and their families, but also on firms' productivity, and on the overall performance of the economy.

The same table shows that 25 percent of all employees in Bulgaria had an employer who did not pay any mandatory social security contributions. The non-payment of social security contributions was dramatic in agriculture, where it reached 61 percent of employment, and in trade and construction, where it was respectively 46 percent and 42 percent. This indicates that social security contributions may be too high in Bulgaria and that these high levels may *in fine* adversely affect the true level of protection among workers, especially in small businesses. In 1998, indeed, social contributions amounted to 39 percent of total labour costs in Bulgaria, compared with 24 percent in the European Union (Garibaldi et al., 2001).

There is also evidence of a very low enforcement of the Labour Code regarding the provision of paid annual leave. In principle, each employee with a length of service of at least 8 months is eligible for a minimum of 20 work days of annual paid leave. But according to the BIHS, in mid 2001 about 21 percent of eligible workers were not provided with annual paid leave. There are also broad differences across sectors. For instance, one out of two workers was not provided with any annual paid leave in agriculture and construction, one out of three in trade, and one out of four in commercial services. With respect to the actual number of days of paid leave, the same table shows that the annual national average of 18 days among eligible workers was below the minimum legal requirement of 20 days. And again, the agriculture, construction and trade sectors stand out as having much less favourable working conditions regarding the number of days of paid annual leave.

These results confirm the gaps in the observance of working condition principles, and show that the real level of workers' protection may be far below what is stipulated in the Labour Code. This should be of major concerns as poor working conditions are important non-income dimensions of poverty. A low enforcement of the Labour Code also exposes

workers and their families to a greater risk to income poverty, as their capacity to protect their income against various shocks is substantially reduced.

4.2 Perception of Well-being at Work

Besides direct measures of working conditions, it is interesting to look at workers' perception of well-being at work. Subjective measures of well-being do indeed add-up value to the monitoring of objective measures as the former often help to foresee people's attitude and behaviour. For this purpose, the International Social Survey Programme[6] (ISSP) provides a unique opportunity. The 1997 module on work orientations contains a number of questions on working conditions as perceived by respondents. The ISSP is a continuing annual program conducted by national statistical agencies of different countries around the world and designed to monitor opinions and attitudes towards specific themes. The 1997 module on work orientations was conducted in 25 countries, including Bulgaria, and provides a useful source of comparable data across countries. Considerable care is required, however, when drawing international comparison on these subjective measures. There can be subtle differences between countries in the way the questions about working conditions are asked and interpreted, and in the timing of the survey. For instance, 1997 was a particularly difficult year in Bulgaria. There may also be some systematic country specificities in the way people respond to these types of questions.

Bearing in mind these limitations, 6 measures of perceived well-being at work are reported in Table 11 for 9 European Union countries (EU) and 6 Central and Eastern European countries (CEE). Broad differences in opinions regarding job security emerged in 1997 between Bulgaria and other transition countries, and between Bulgaria and the EU. For instance, the proportion of workers who were very worried to lose their jobs amounted to 24 percent in Bulgaria, compared with an average of 12 percent among represented EU countries and of 15 percent among CEE countries.

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[6] More information on the programme can be found at www.issp.org.

Table 11: Perception of Well-being at Work in Selected Eastern and Western European Countries, 1997 *(percent among the employed)*

	Strongly Agree that Job is Secure	Very Worried to Lose Job	Always Work in Dangerous Conditions	Always Come back from Work Exhausted	Very or completely satisfied in main job	Strongly Agree that Job is Interesting
Denmark	53.2	3.5	3.1	3.1	61.1	56.2
France	24.5	14.4	2.1	6.9	33.4	29.8
Germany	27.8	9.5	3.2	6.2	36.2	27.8
Great Britain	12.5	7.8	3.3	9.0	35.2	17.0
Italy	25.4	7.8	3.3	10.3	35.0	25.0
Netherlands	18.2	4.0	1.8	2.3	47.8	18.4
Portugal	39.7	23.3	11.9	25.5	38.9	49.8
Spain	24.6	26.8	5.6	9.0	49.2	16.3
Sweden	16.3	8.0	2.4	5.0	40.1	19.9
EU average[a]	26.9	11.7	4.1	8.6	41.9	28.9
Bulgaria	**11.0**	**24.3**	**8.6**	**15.7**	**28.4**	**12.3**
Czech republic	18.3	7.7	10.1	7.0	28.2	17.4
Hungary	13.2	8.1	13.2	10.8	23.1	14.5
Poland	15.1	10.0	10.0	10.0	26.4	12.4
Russia	29.5	22.8	8.5	11.1	38.8	19.3
Slovenia	39.2	17.1	9.7	12.6	26.7	30.8
CEE average[a]	21.0	15.0	10.0	11.2	28.6	17.8

Source : International Social Survey Programme, 1997.
Note : [a] Non-weighted average among above countries only.

Health and safety at work appears also to be distinctly worse in Bulgaria, and in the CEE in general, than in the EU. The percentage of workers that reported always working in dangerous conditions was in fact two times bigger in Bulgaria than in the EU. Bulgaria has also the second largest share, after Portugal, of jobholders that reported always coming back from work exhausted. Addressing the issue of health and safety at work seems therefore to be particularly important for the government of Bulgaria, which would need to find cost-effective ways to support investments in working conditions in the most dangerous sectors. These can include, for instance, the provisions of loans conditional on a better enforcement of working conditions.

The results also suggest that workers were less satisfied with their jobs in Bulgaria and in other neighboring countries than in the EU. Of concern for the retention of qualified workers is that Bulgaria was the country with the lowest proportion of workers feeling that their job was interesting. This last result echoes the information gathered from other surveys that show that a large number of highly educated young people were willing to emigrate (Beleva et al., 2001).

Overall, these figures points to a lower level of well-being perceived by Bulgarian workers, relative to their EU counterparts. Their also add value to our understanding of poverty in Bulgaria by revealing how people feel about their work environment. Monitoring the perception of well-being has also important implication for policy makers, in terms of understanding people's attitude and behaviour and paving the way for a thoughtful and holistic dialogue on poverty in Bulgaria.

4.3 The nature of Precarious Employment

The previous results have revealed a serious problem with the quality of employment in Bulgaria which echo the low level of well-being at work perceived by Bulgarian workers. The question asked here is to what extent precarious jobs, as defined as a low-paid, low-job tenure jobs which do not pay social security contribution and offer little paid annual leave, are concentrated among specific jobs, in addition to industrial variations observed earlier. In other words, what is the nature of precarious employment in Bulgaria? Table 12 sheds some light on this issue by presenting correlation coefficients between various direct measures of working conditions for different employment types.

Table 12: Correlation Coefficients between Various Measures of Job Quality

	Nature of Employment		
	No Contract	**Contract-fixed term**	**Contract-permanent**
Low paid job	0.10**	0.04*	-0.11**
No social insurance contributions	0.57**	0.01	-0.41**
Average days of paid leave	-0.53**	-0.07**	0.42**
Average job tenure	-0.19**	-0.15**	0.25**

Source: BIHS (2001).
Note: ** and * means statistically significant at 1% and 5 % levels respectively.

The results show a strong correlation between informal jobs on the one hand and low wages, arrears in social security contributions paid by employers, low provision of paid annual leave and low job tenure on the other hand. Inadequate working conditions are thus particularly evident in the case of the informal sector. This is even more worrisome given the low probability of escaping informal employment in Bulgaria (Table 6).

The results also indicate that there was a statistically significant but smaller correlation between temporary formal work and low-paid work, lower paid annual leave and lower job tenure, but that there was no particular correlation between temporary formal work and the non-payment of social security contributions. Permanent work, on the other hand, was associated with a lower incidence of low-paid work, lower evasion of social-security contributions, higher provision of paid annual leave and higher job stability. Thus, precarious employment in Bulgaria tends to be mostly – though not exclusively - concentrated among informal jobs.

So far, the analysis has identified a number of poor labour market outcomes, ranging from joblessness to precarious employment, and their direct or indirect links with income and non-income poverty. The aim of the next section is to now to identify those vulnerable groups with a high risk of facing one or more of these poor labour market outcomes.

5 Identifying Vulnerable Groups and the Nature of their Risks in the Labour Market

The regression analysis conducted in Section 3 confirmed the importance of household labour market performance and demographic composition for the poverty status of each individual, regardless of his or her own employment status. Individual circumstances in the labour market were important for individual poverty status, but more in terms of mitigating or worsening the dominant impact of family events. For both the unemployed and the employed, the main labour-related sources of income poverty were a large incidence in their household of unemployment, inactivity, and low-paid work. Our understanding of poverty was then complemented in Section 4 by a review of working conditions and perception of workers' well-being, which are important non-income dimensions of poverty in the workplace. Precarious jobs, identified here as low-paid jobs with poor working conditions, were particularly visible in the informal sector. This section examines the determinants of poor labour market outcomes and identify these individuals at risk of non-employment, low-pay work, and poor working conditions. Answering these questions is essential to better understand the diverse needs of specific groups in the labour market and to design targeted programmes that have a higher chance of success (Fay, 1996; Fretwell et al., 1999; Walsh et al., 2001).

5.1 Correlates of Inactivity Among Adults not in Education

Table 13 presents the respective contribution of various individual and local labour market characteristics on the probability of being inactive among individuals who are not pensioners nor in education. Compared with men without children, inactivity among adults not in education and not in the pension scheme is disproportionately concentrated among adults with children, both men and women, while there are no differences, in terms of inactivity, between men and women without children. The fact that men with children have a higher probability of being inactive is surprising, however. For men, the income needs associated with dependants children usually increase labour participation, and the unexpected finding that emerged from the Bulgarian data set may therefore hide other effects that are difficult to observe.

Table 13: Marginal Impact of Selected Characteristics Obtained from Probit Estimates of the Probability of being Inactive *(percent)*

	Inactive not in Education and not Pensioner
Individual Characteristics	
Women with children	34.5**
Women without children	3.6
Men with children	22.4**
Men without children (control)	-
Age 16-25	-16.3**
Age 26-45	-33.6**
Age 46+(control)	-
Disability/illness	4.3**
Bulgarian (control)	-
Turkish	-11.8**
Gypsy	-14.7**
Primary education or less	73.8**
Less than secondary	44.4**
Secondary	10.0**
University (control)	-
Local Labour Market Characteristics	
Rural	9.5
Regional unemployment rate	-8.0
Sample for estimation	All inactive individuals not looking for a job for reasons other than education and old-age
N	5154
Pseudo R^2	0.2232

Source: BIHS, 2001.
Note: ** and * means statistically significant at 5% and 10 % levels respectively.

Young adults of age 16-25 and individuals of age 26-45 have also a lower probability of being inactive than individuals aged 46 and above, which likely reflects a higher incidence of discouragement among older individuals.

Another group with a very high probability of being inactive are the least educated, who may have a very low employability in the new labour market and who may be very likely to become discouraged. Reporting disabilities or illnesses in the past year is another significant correlate of inactivity that may indicate both the incapacity to work for some of the disabled as well as the lack of suitable work or work arrangement for people with partial

disabilities and illnesses. Interestingly, compared with ethnic Bulgarians, Roma and Turkish have a lower probability of being inactive when controlling for the level of education.

With respect to local labour market characteristics, it is worth noticing that neither the regional unemployment rate nor the rural dummy are affecting the probability of being inactive. Controlling for other factors like age and education, there is no signs that living in a depressed or jobless area affects significantly the probability of being inactive. Inactivity among adults not in education seems therefore strongly attached to individual characteristics.

5.2 Correlates of Unemployment and Long-term Unemployment

To isolate the determinants of unemployment and long-term unemployment, the probability of being unemployed is first estimated on the whole sample of labour market participants (the unemployed and the employed). The probability of being long-term unemployed is then regressed on the restricted sub-sample of the unemployed in order to determine which particular groups, among the unemployed, are at a higher risk of experiencing long-term unemployment. The results are presented in Table 14.

The group with the highest risk of being unemployed are the youth, people of Gypsy ethnicity, low educated people, and individuals living in regions affected by widespread unemployment. Another group at risk, but to a lower extent, are women, individuals from Turkish ethnicity and people living in rural areas. In this light, the profile of the unemployed remained very similar to that observed in 1997 (Rutkowski, 1998).

Once in unemployment, the groups with the highest risk of remaining in unemployment for more than a year are individuals of Gypsy and Turkish ethnicities, individuals with disabilities or illnesses, individuals with less than secondary education, and people living in depressed areas with high unemployment rates.

Table 14: Marginal Impact of Selected Characteristics Obtained from Probit Estimates of the Probability of being Unemployed and Long-term Unemployed *(percent)*

	Unemployed	Long-term
Individual Characteristics		
Female	3.5**	2.4
Age 16-25	20.7**	-23.5**
Age 26-45	-0.7	-7.1
Age 46+ (control)	-	-
Turkish	9.0**	19.3**
Gypsy	34.2**	20.9**
Bulgarian (control)	-	-
Disability/illness	0.7	8.2**
Primary education or less	24.8**	13.7*
Less than secondary	29.0**	18.8**
Secondary	13.7**	16.4**
University (control)	-	-
Local Labour Market Characteristics		
Rural	8.4**	3.8
Regional unemployment rate	65.8**	60.8**
Sample for estimation	Labour force	Unemployment pool
N	3636	1225
Pseudo R^2	0.1750	0.0774

Source: BIHS, 2001.
Note: ** and * means statistically significant at 5% and 10 % levels respectively.

5.3 The Determinants of Low Wages

Simultaneous-quantile regression analysis is used here to capture the impact of various factors that may affect wages differently, depending on the portion of the wage distribution that is examined. This technique focuses a particular attention to the determinants of low wages, as opposed to the determinants of mean wages. In Table 15, the results of the estimations are presented for hourly wages and for the 25th, 50th and 75th wage percentiles.

The basic estimates of the gender wage gap, measured by the coefficients of the female dummy, are all statistically significant, indicating that women still face a form of wage discrimination, even after controlling for other factors like tenure, education and industries. What is remarkable is that the gender wage gap is less pronounced in low-paid jobs. The size of the gap is 18 percent in low-paid jobs (bottom quartile), compared with respectively 21 percent in middle-paid jobs (middle quartile) and 25 percent in high-paid jobs

(top quartile). Wage discrimination against women has nonetheless declined since 1995, where the wage gap accounted for 23 percent in low paid jobs, 29 percent in middle paid jobs, and 34 percent in high paid jobs. Interestingly, a higher level of gender wage discrimination in better-paid jobs has been observed in other countries of Eastern Europe and Central Asia (Newell and Reilly, 2000).

There is also some evidence of wage discrimination against Roma among low-paid workers, although the effect is statistically significant only at the 10 percent level. The size of the effect is about 14 percent for both hourly and monthly wages, which is lower than the size of the gender pay gap. Earlier work on the determinants of wages in Bulgaria did not find a statistically significant effect of the Roma variable (Rutkowski, 1998), but this may be because the estimations were conducted on average wages.

With respect to health status, the data strongly support that poor health conditions are an important factor affecting the wage of the poorest. All else equal, workers in poor health conditions earn 7 percent less in low-paid jobs, while the health variable does not seem to be particularly significant among middle-paid and high-paid workers. This suggests a greater vulnerability of low-paid workers who may have fewer opportunities to protect their wages against health risks.

The same Table 15 shows that there are important returns to secondary and higher education in Bulgaria, compared with less than secondary. The returns to education are slightly more pronounced at the top of the wage distribution. For instance, all else being equal, the wage premium associated with secondary education is 44 percent in low-paid jobs, 47 percent in middle paid jobs, and 51 percent in high-paid jobs. For university education, the premium reaches 100 percent in low-paid jobs, 102 percent in middle paid jobs, and 106 percent in high-paid jobs.

The returns to tenure in the current firm are concave. Among low-paid jobs, there is an increase in wages up to an average of 25 years of tenure, and a decline after that. The decline in wages with tenure starts even earlier in better paid jobs: respectively after 20 years in middle-paid jobs and after 17 years in high-paid jobs. Interestingly, age remain an important determinant of wages even one job tenure is controlled for. Compared with mature adults (26-45), youth and people close or above the retirement age earn significantly less.

Table 15: Simultaneous-quantile Regression Estimates of the Log Hourly Wage

Explanatory Variables	25th percentile	50th percentile	75th percentile
Individual Characteristics			
Female	-0.195**	-0.231**	-0.283**
Age 16-25	-0.131**	-0.122**	-0.131**
Age 26-45 (control)	-	-	-
Age 46-55	-0.062*	-0.065**	-0.023
Age 56+	-0.156**	-0.141**	-0.088
Job tenure	0.019**	0.017**	0.021**
Job tenure square(×100)	-0.037*	-0.038**	-0.056**
Bulgarian (control)	-	-	-
Turkish	-0.078	-0.053	0.167*
Gypsy	-0.154*	-0.140	-0.079
Disability/illness	-0.072*	-0.049	-0.041
Primary education or less (control)	-	-	-
Less than secondary	0.164	0.129	0.172
Secondary	0.366*	0.388**	0.418**
University	0.698**	0.702**	0.723**
Job Characteristics			
Manufacturing and industry	-	-	-
Construction	-0.064	-0.070	-0.073
Agriculture and forestry	-0.361**	-0.100	-0.157**
Transport and communication	-0.121**	-0.049*	-0.080
Trade	-0.258**	-0.213**	-0.161**
Commercial services	-0.193**	-0.168**	-0.148*
Finance	-0.032	0.012	0.062
Social services	-0.227**	-0.145**	-0.089*
Private	-0.067	-0.053	-0.024
No contract	-0.147**	0.014	0.111
Contract - temporary	0.031	-0.001	-0.048
Contract – indefinite term (control)	-	-	-
Local Labour Market Characteristics			
Rural	-0.028	-0.059	-0.086*
Regional unemployment rate	-0.454**	-0.675**	-0.564**
N	1503	1503	1503
Pseudo R^2	0.157	0.153	0.135

Source: BIHS 2001.

Note: ** and * means statistically significant at 5% and 10 % levels respectively. The percentage effects of a dummy variable in semi-logarithmic equations of the form log(Y)=aX+b d is exp(a)-1, not a.

The data also show large disparities across industries. For instance, among low-paid workers, wages in agriculture are 30 percent less than in manufacturing. Wages are also significantly lower in trade (-22 percent), in social services (-20 percent), in commercial services (-17 percent), and in transports (-11 percent). Interestingly, these disparities are less marked in better-paid jobs. For instance, in high-paid jobs, workers in transports no longer earn less than in manufacturing, and the wage gap is down to 14 percent in agriculture, 15 percent in trade, 8 percent in social services, and 14 percent in commercial services. Thus, the distribution of low-paid industries tends to vary, to some extent, according to the type of jobs. And inter-industry wage inequalities appear higher in low-paid jobs.

Working in the private sector is no longer associated with lower wages once the type of contract is controlled for. What is remarkable is that informal employment is significantly associated with low wages among low-paid jobs, but it is not significant at higher level of the wage distribution. In other words, while informalisation is resulting into lower wages in low-paid jobs, this is no longer true in better paid jobs.

With respect to local labour market conditions, an important result is that regional unemployment exerts a strong moderating impact on wages, especially on the second and top wage quartiles. The unemployment elasticity of pay computed at the mean value of the regional unemployment rate is –0.15 for low-paid jobs, -0.22 for middle-paid jobs, and –0.19 for high-paid jobs, which is close to what is observed in many industrial countries (Blanchflower and Oswald, 1994). This equilibrating mechanisms is new for Bulgaria[7], and it means that growing wage flexibility is taking place in the labour market. Considering the large increase in unemployment over the past 5 years, this could be one explanation of why the overall decline in real wages was so important relative to the decline in labour productivity.

To sum up, the previous results have shown that the determinants of wages and the size of their impacts are not necessarily identical in low and high paid jobs, reflecting a form of segmentation in the labour market. In low-paid jobs, being a Roma, having health problems, and being employed in the private sector has a negative effect on pay, while these characteristics do not seem particularly significant in better-paid jobs. Another difference is

[7] In 1997, the regional unemployment rate did not exert any influence on average wages (Rutkowski, 1998).

that the return to education and the gender pay gap were more pronounced in high-paid jobs. However, in both low-paid and high-paid jobs, lower wages are observed for women, older workers with a job experience that is not longer valued by employers, workers with little education, workers in agriculture, trade, social services, commercial services and transports, and people working in regions with large unemployment.

5.4 Workers at risk of poor working conditions

Who are the workers at risk of poor working conditions? Table 16 provides some insight on this question by presenting the results of multivariate analysis conducted on the sample of wage employed in order to isolate the respective contribution of individual and job characteristics to a poor work environment, as captured by the lack of a labour contract, the non-payments of social insurance contributions by the employer and the non-provision of paid annual leave. The results show that individual characteristics, regardless of the sector of employment, do play an important role in explaining the extent of social protection at work. Individuals at a greater risk of working under poor conditions were the youth, elderly workers, persons belonging to the Turkish and Roma minorities, and workers with little education.

In addition to individual characteristics, there were large differences across sectors and between the private and the public sector. In general, the working conditions were worse in the private sector and in construction, agriculture, trade and commercial services. Interestingly, there seemed to be no regional differences.

What is thus remarkable is that to a large extent, the individual profile of jobholders working under precarious conditions is similar to that of the active unemployed, discouraged unemployed or low-paid workers. This shows the multiple aspects of vulnerability experienced by certain groups in the labour market, vulnerability that takes the form of a difficulty in finding a job, but also once in employment, of a inability to avoid low-paid jobs and poor working conditions.

Table 16: Multivariate Correlates of Selected Poor Working Conditions Obtained from Probit Estimates *(marginal impact in percent)*

Explanatory Variables	No Contract	No Social Insurance Contributions Paid by Employer	No Paid Annual Leave
Individual Characteristics			
Female	-0.9	2.1	-1.6
Age 16-25	4.1**	15.1**	11.9**
Age 26-45	1.3	2.1	-0.0
Age 46-55 (control)	-	-	-
Age 56 and above	5.8**	14.6**	5.2
Bulgarian (control)	-	-	-
Turkish	12.9**	26.8**	30.9**
Gypsy	17.1**	19.7**	29.3**
Primary education or less (control)	-	-	-
Less than secondary	-3.1**	-13.0*	-9.3
Secondary	-6.5**	-21.2**	-14.9*
University	-5.7**	-22.1**	-17.9**
Sector and Type of Ownership			
Manufacturing and industry (control)	-	-	-
Construction	20.4**	24.5**	28.5**
Agriculture and forestry	21.4**	35.2**	31.1**
Transport and communication	4.4**	6.6	4.7
Trade	11.4**	25.5**	27.9**
Commercial services	9.8**	15.3**	24.1**
Finance	4.0*	13.4**	11.3**
Social services	7.9**	12.2**	10.7**
Private	12.8**	23.1**	17.9**
Location			
Rural	0.6	1.2	3.1
Sofia city (control)	-	-	-
Sofia region	1.1	-0.2	-0.8
Bourgass	-0.4	-10.6**	-1.7
Varna	0.7	-3.1	3.1
Lovetch	-1.4	-5.1	-3.4
Montana	0.2	-5.5	-3.1
Plovdiv	-1.7	-8.9**	-10.9
Rousse	-1.3	0.6	4.7
Haskovo	-1.1	-6.1	-7.3*
N	2133	1666	1942
Pseudo R^2	0.3230	0.1921	0.1924

Source: BIHS, 2001.
Note: ** and * means statistically significant at 5% and 10 % levels respectively.

5.5 The Multiple Aspects of Vulnerability in the Labour Market

Table 17 provides a summary of various labour market outcomes attached to different groups. What is worth highlighting at this stage is the great vulnerability of persons with no or little education and people of Roma ethnicity who cumulate a high risk of being unemployed, of remaining longer in unemployment, or if in employment, of being low-paid and working under poor working conditions. Addressing the needs of these most disadvantaged groups would therefore require an integrated approach to pro-employment policies, social policies, and measures that contribute to make work pay and improve the conditions of work.

Table 17: Summary of Labour Market Outcomes and Vulnerable Groups

	Unemployed	Long-term Unemployed	Inactive[a]	Low-paid	Poor Working Conditions
Low educated	X	X	X	X	X
Roma	X	X		X	X
Turks	X	X			X
Youth	X			X	X
Disabled		X	X	X	
Living in depressed area					
Individuals close to retirement age			X	X	
Women	X			X	
Adults with children			X		
Living in a rural area	X				

Source: Based on the results displayed in Tables 12-14.
Note: [a]excludes pensioners and those in education. X means correlations statistically significant at the 5 or 10 percent level

The youth face a somewhat different situation, as their main problem is to find a first job in the formal sector that provide decent conditions, while their wages will increase with tenure. Individuals from Turkish origin also face a high risk of unemployment and poor working conditions, but they do not seem to experience any disadvantage in terms of cash pay. Conversely, the problem for women is not so much in terms of unemployment, as their

risk of being unemployed is only slightly higher, but more in terms of a gender wage gap that will affect their entire working life. Thus, while the youth and individuals from Turkish origin are likely to benefit from policies promoting job placement in decent jobs, for women, a greater emphasis should be paid on the enforcement of equity in gender pay, as stipulated in the Constitution of Bulgaria.

Location also plays an important role on the employment prospects of people in Bulgaria, as well as on their pay, and people living in depressed area would most likely benefit from more decentralised and locally driven programmes.

Another group composed of individuals close to the retirement age and individuals with disabilities and illnesses face a high risk of being excluded from the labour market, or of being low-paid if employed. Given the low level of labour demand in Bulgaria, the scope for reintegrating this group into decent employment may be limited, and social protection measures may be more suited to lift them out of poverty. However, in a period of economic growth and increasing employment opportunities, the opening of active labour market programmes for discouraged workers and the development of disabled-friendly work arrangements and facilities, as well as a better enforcement of the Labour Code regarding the provision of specific jobs for the disabled, can be expected to increase somewhat the participation of older and disabled individuals, and thus to reduce the extent of labour market exclusion.

Exclusion from the labour market is also visible among adults with children, who tend to have some difficulties in combining family responsibilities with work. Work/family reconciliation policies could, in this respect, be vital for increasing the employment rates of parents, and reduce poverty in the labour market. These can include encouraging child care services (whatever form they take) and developing more flexible work arrangements.

6 Conclusion

The aim of this paper was to ascertain the multiple aspects of vulnerability in the labour market, to explores its relationship to income and non-income poverty, and to identify those vulnerable groups at risks of poor labour market outcomes. While the resumption of economic reforms in Bulgaria has translated into a visible improvement of economic conditions and a stagnation of income poverty after 1997, poverty has increased overall

during 1995-2001. In early 2000, there were many vulnerable individuals that faced disproportionately high risk of income and non-income poverty as a result of poor labour market prospects. The main findings are summarised below.

First, in terms of income poverty, the data show that the traditional dichotomy between the unemployed and the employed has limitations. Accounting for the heterogeneous nature of jobs and characteristics of unemployment, one could see that income poverty was not evenly spread among all unemployed and all employed: in mid 2001, the highest poverty rates were observed among the long-term unemployed, but the incidence of poverty was also high among workers in informal jobs, who were at a higher risk of income poverty than the short-term unemployed.

Second, the results point to the importance of carefully examining the individual poverty status of the employed and the unemployed in the context of their household socio-economic environment. Regardless of each individual's employment status, the probability of an individual of being poor resulted from a combination of weak household labour market performances in the form of high incidence of unemployment, inactivity, and low-paid work, and the presence of dependant children. Individual circumstances in the labour market were important for the individual poverty status, but more in terms of mitigating or worsening the dominant poverty impact of family events.

Third, the results show that attacking non-income dimensions of poverty in the workplace remains an important challenge in Bulgaria. Despite the transposition of most EU requirements in the labour area into Bulgarian legislation, a large gap remained in practice and the real level of workers' protection was far below what is stipulated in the Labour Code. A large share of employees was found to be working without a formal contract, with no social insurance coverage, no paid leave, and a high job instability. The combination of low-wages and poor working conditions was particularly evident in the informal sector. Poor working conditions have important human and economic costs, not only for workers and their families, but also for enterprises, in terms of lower productivity, and for the country as a whole, in terms of labour migration and reduced opportunities for pro-poor growth.

Finally, the results show the existence of multiple labour-related risks faced by specific groups. What emerged from this research is the extreme vulnerability of low

educated people and Roma, who cumulated a high risk of being unemployed, of remaining longer in unemployment, and if employed, of being low-paid, and working under precarious conditions. Other groups facing multiple risks in the labour market were the youth, the Turks, people with disabilities and individual living in depressed areas.

Addressing the multiple aspects of vulnerability in the labour market would therefore require a holistic approach including (i) the promotion of job creation, (ii) supporting the employment of vulnerable groups (iii) social policies (iv) making work pay (v) and measures that will improve the conditions of work.

Job Creation:

- As noted in this paper, unemployment remains very high in Bulgaria and it has a strong regional dimension. This points to a general problem of low job creation associated with large spatial inequalities. A rigorous analysis of the constraints to job creation should be undertaken and regularly updated as to provide some concrete guidance on the way to stimulate labour demand and enhance social cohesion.

Supporting the Employment of Vulnerable Groups:

- Besides the overall high level of unemployment in Bulgaria, it is important to recognise that specific groups, namely the youth, low educated people, people from ethnic minorities, people with partial disabilities and individuals close to the retirement age face a disproportionate high risk of labour market exclusion and require particular attention. Bulgaria has developed an active labour market policy to help address the problem of unemployment but issues of targeting and socio-economic impact of the proposed programmes need to be carefully considered. Sound impact evaluation techniques should be used on a regular basis to evaluate the impact of active measures and decide which programmes should be continued, improved or cancelled, and which particular group should be targeted.

Making Work Pay:

- As shown in the paper, low-paid workers often shared similar characteristics with the unemployed, and as for unemployment, there is a strong link between low-paid work and household poverty. This indicates the importance of complementing active programmes

that emphasis job placement and passive policies that cover insurable risks with measures that help make work pay for the most vulnerable, improve the career prospects of low-paid workers, and assist mobility out of low-paying jobs. A desirable option could thus to experiment with ALMPs targeted on the working poor in order to raise the productivity of low-paid workers. The results should be evaluated as to decide on the continuation of the programmes;

- Raise awareness of employers on gender equity issues as a way to reduce the gender-wage gap;

Social Protection:

- The presence of children has been identified as an important correlate of poverty and the level of child benefits should be increased as an effective tool to reduce poverty;
- In the context of high unemployment, the scope for reintegrating into decent employment individuals close to the retirement age and individuals with disabilities may be limited. Thus, to lift this group out of poverty, a better instrument is probably to rely on the current Guaranteed Minimum Income programme. A close monitoring of this system is needed, however, to make sure that this programme achieves its objective of complementing other social transfers and earnings when these are inadequate to cover basic family needs.

Improving the Conditions of Work:

- Given the strong incentives to avoid compliance with the Labour Code, only a gradual and pragmatic approach is likely to reduce the gaps in the observance of working conditions. As a preliminary step, it would be useful to carry a careful cost-benefit analysis of enforcement and effective monitoring. This means estimating the incremental administrative costs needed for stronger compliance, and assessing the risk that too rigid regulations may harm the development of small and medium enterprises that are crucial for job creation, and *in fine* increase the incentives to join the informal sector. It also requires reviewing the economic costs of improving working conditions against the economic and non-economic costs of not improving them. The latter includes the human and financial costs carried by workers exposed to an unhealthy and poor work

environment, as well as by their families; the economic costs to enterprises in terms of lower productivity; and eventually the overall national costs in terms of lower growth and higher morbidity and mortality.

- Extend social protection to informal workers by raising awareness of informal employers on the links between working conditions and productivity;
- Making formal social protection more affordable to enterprises by considering a careful and gradual reduction in the level of social security contributions more in line with the EU average.

References

Beleva, I.; Ivanov, A.; O'Higgins, N. and F. Pastore (2001): "Targeting Youth Employment Policy in Bulgaria". Mimeo. Geneva: International Labour Organisation.

Blanchflower D. and A. Oswald (1994): "The Wage Curve", Cambridge, MA: The MIT Press.

Dorman, P. (2000): "The Economics of Safety, Health and Well-Being at Work: An Overview. Mimeo. Geneva: International Labour Organisation.

Fay, R. (1996): "Enhancing the Effectiveness of Active Labour Market Policies: Evidence from Programme Evaluations in OECD Countries". Labour Market and Social Policy Occasional Paper, No. 18. Paris:OECD.

Forastieri, V. (1999): "Improvement of Working Conditions and Environment in the informal Sector through Safety and Health Measures". Mimeo. Geneva: International Labour Organisation.

Fretwell, D.; Benus, J. and C. O'Leary (1999): "Evaluating the Impact of Active Labour Market Programme: Results of Cross-Country Studies in Europe and Central Asia". Social Protection Working Paper, No. 9915. Washington, DC: World Bank.

Gantcheva, R. and A. Kolev (2001): Children in Bulgaria: Growing Impoverishment and Unequal Opportunities. Innocenti Working Paper No 84. Florence: UNICEF Innocenti Research Centre.

Garibaldi, P.; Makovec, M. and G. Stoyanova (2001): "From Transition to EU Accession: The Bulgarian Labor Market During the 1990s". World Bank Technical paper, No 494. Washington, DC: World Bank.

IMF (2001): "Labor Markets in Hard-Peg Accession Countries: The Baltics and Bulgaria" IMF Country Report No. 01/100. Washington, DC: IMF.

Newell A. and B. Reilly (2000): "The Gender Pay Gap in the Transition from Communism: Some Empirical Evidence:. William Davidson Institute Working Paper No. 305.

OECD (2001) Employment Outlook, Paris.

OECD (2000) Employment Outlook, Paris.

O'Higgins, N. (1997): "The Challenge of Youth Unemployment". Employment and Training Papers, No 7. Geneva: International Labour Organisation.

Rutkowski, J. (1998): "Labor Markets and Poverty in Bulgaria". Mimeo: Washington, DC: World Bank.

Saget, C. (2001): "Poverty Reduction and Decent Work in Developing Countries: Do Minimum Wages Help? *International Labour Review*, Volume 140, No 3.

Teşliuc, C. (2001): "Social Protection and Poverty Reduction in Bulgaria". Mimeo: Washington, DC: World Bank.

UNICEF (2000): "Young People in Changing Societies". Regional Monitoring Reports, No.7. Florence: UNICEF Innocenti Research Centre.

Walsh, K; Kotzeva, M.; Dölle, E.; and R. Dorenbos (2001): "Evaluation of the Net Impact of Active Labour Market Programme in Bulgaria". Ministry of Labour and Social Policy of Bulgaria, Rotterdam.

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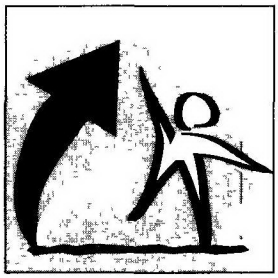

Summary Findings

This paper uses data from the Bulgarian Integrated Household Surveys and the International Social Survey Programme (ISSP) to examine the multiple aspects of vulnerability in the labor market in Bulgaria in the late 1990s. The paper starts by examining the links between poverty and labor market outcomes, drawing a particular attention to the heterogeneity of jobs and the multiple aspects of poverty. It then identifies those groups at risk of one or more poor labor market outcomes, revealing the existence of particularly vulnerable groups who cumulate a high risk of being unemployed, of remaining longer in unemployment, and if employed, of being low-paid, and working under precarious conditions.

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